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10/593,969	07/16/2007	Lorenzo Magnone	09952.0076	5622

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EXAMINER	
AMBAYE, MEWALE A	
ART UNIT	PAPER NUMBER
2416	
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/593,969	MAGNONE ET AL.	
	Examiner	Art Unit	
	MEWALE AMBAYE	2416	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *06 July 2007*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *24-46* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *24-46* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *22 September 2006* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☒ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date *09/22/06*.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

1. Claims 24-46 are pending.

Oath/Declaration

2. The oath/Declaration filed on 07/16/2007 is accepted by the examiner.

Information Disclosure Statement

3. The information disclosure statement filed on 09/22/06 is in compliance with 37 CFR 1.97. Accordingly, the information discloser statement is being considered by the examiner.

Drawings

4. The drawings filed on 09/22/06 are accepted by the examiner.

Claim Rejections - 35 USC § 102

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

6. Claims **24-26, 40 & 45-46** are rejected under 35 U.S.C. 102(b) as being anticipated by Bowman et al (hereinafter referred as Bowman) US Patent No. 6,556,659 B1.

7. **As per claim 24, 40:** Bowman discloses a system/method for the quality status analysis of an access network of a fixed network infrastructure, said access network comprising a plurality of cables, a set thereof supporting broadband transmissive systems *(See Col 18, line 47 – Col 19, line 21 & abstract, the service level agreement and failures with the network is checked to determine if the quality service is met)*, comprising: an information acquisition

module configured for drawing static network information stored in first data sources *(See Col 22; lines 41-49 & FIG. 1C-1, the Customer Interface Management 132 receives the service level agreement (Static Info's, i.e. number and location address))* and dynamic network information relating to said broadband transmissive systems from second data sources *(See Col 22; lines 17-25 & FIG. 1B-1, Network Data Management 130 receive data related to usage and events (Dynamic Info's, i.e. monitoring, performance goals, capacity request and etc))* ; and an information processing module configured for: collecting said static and dynamic network information from said information acquisition module *(See Col 2;, lines 50-67 & FIG. 1D, the Network Data Management 130 and the Customer Interface Management 130 are used to give information to the Customer Quality of Service Management Process 134)*; and processing said static and dynamic network information to obtain at least one index representing said quality status of said access network *(See Col 22; lines 50-67, the Quality of Service Management Process 134 encompasses monitoring, managing and reporting of quality service. In addition, it reports performance of a service against Service Level Agreement (index representing the quality status of the access network).*

8. **As per claim 25:** Bowman discloses a system wherein said dynamic information comprises transmissive parameters associated with said broadband transmissive systems *(FIG. 1B, the Network Data Management 130 comprises dynamic info's, i.e. monitoring, performance goals, capacity request and etc).*

9. **As per claim 26:** Bowman discloses a system wherein said static network information comprises at least information about a structure of said access network *(FIG. 1C, the Customer Interface Management 132 comprises static info's, i.e. number and location address).*

10. **As per claim 45 & 46:** A fixed network infrastructure/a program for an electronic computer and comprising program codes to implement, comprising an access network comprising a plurality of cables, a set thereof supporting broadband transmissive system, and a system for analyzing the quality status of said access network implemented; an information acquisition module configured for drawing static network information stored in first data sources *(See Col 22; lines 41-49 & FIG. 1C-1, the Customer Interface Management 132 receives the service level agreement (Static Info's, i.e. number and location address))* and dynamic network information relating to said broadband transmissive systems from second data sources *(See Col 22; lines 17-25 & FIG. 1B-1, Network Data Management 130 receive data related to usage and events (Dynamic Info's, i.e. monitoring, performance goals, capacity request and etc))* ; and an information processing module configured for: collecting said static and dynamic network information from said information acquisition module *(See Col 2;, lines 50-67 & FIG. 1D, the Network Data Management 130 and the Customer Interface Management 130 are used to give information to the Customer Quality of Service Management Process 134)*; and processing said static and dynamic network information to obtain at least one index representing said quality status of said access network *(See Col 22; lines 50-67, the Quality of Service Management Process 134 encompasses monitoring, managing and reporting of quality service. In addition, it reports performance of a service against Service Level Agreement (index representing the quality status of the access network).*

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be

patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

11. Claims **27-30 & 36-39** are rejected under U.S.C. 103(a) as being unpatentable over Bowman, in view of Cruickshank et al. (hereinafter referred as Cruickshank) US Publication No. 2003/0126256 A1.

12. **As per claim 27:** Bowman discloses all the limitation of the independent claim 24 except wherein said second data sources comprises network apparatuses, each network apparatus being configured for handling traffic coming from the cables connected thereto.

However, Cruickshank teaches a system wherein said second data sources comprises network apparatuses, each network apparatus being configured for handling traffic coming from the cables connected thereto *(See FIG ; network monitor 26, it connects traffic coming from the access network through the internet/intranet).*

Therefore, it would have been obvious to one ordinary skill in the art at the time the invention was made to employ the teaching system of Bowman within Cruickshank system in order to get data regarding the network performance in a user friendly manner through the network to the network monitor *(See page 3; Para. 0026).*

13. **As per claim 28:** the combination of Bowman and Cruickshank disclose a system wherein said first data sources comprise network inventories *(See Cruickshank FIG. 2, each nodes 34, 36 & 38 comprises database 58 to process/acquire information).*

14. **As per claim 29:** the combination of Bowman and Cruickshank disclose a system wherein said information acquisition module comprises an access interface to access said first data sources *(See Cruickshank FIG. 1; Application Suite 22).*

15. **As per claim 30:** the combination of Bowman and Cruickshank disclose a system wherein said information acquisition module comprises a data access portion configured to access said second data sources *(See Cruickshank FIG. 1; Nodes 34, 36, 38).*

16. **As per claim 36:** the combination of Bowman and Cruickshank disclose a system wherein said index is a geometric saturation index indicative of the degree of use of said cables in terms of supported broadband transmissive systems *(See Cruickshank Page 3; Para. 0007 & 0022, values related to network topology).*

17. **As per claim 37:** the combination of Bowman and Cruickshank disclose a system wherein said index is a transmissive saturation index indicative of the transmissive status of said cables in terms of bit rate of the support broadband transmissive systems *((See Cruickshank Page 3; Para. 0007 & 0022, values related to network impact).*

18. **As per claim 38:** the combination of Bowman and Cruickshank disclose a system comprising an interface for accessing a network operator (See Cruickshank FIG. 1, controller, 40).

19. **As per claim 39:** the combination of Bowman and Cruickshank disclose a system comprising a database in which are stored the results obtained by the analysis system *(See Cruickshank FIG. 2, each nodes 34, 36 & 38 comprises database 58 to process/acquire information).*

20. Claims **41-44** are rejected under U.S.C. 103(a) as being unpatentable over Bowman, in view of Kobayashi et al. (hereinafter referred as Kobayashi) US Patent No. 7,142,512.

21. **As per claim 41:** Bowman discloses all the limitation of the independent claim 40 except wherein said step of remotely accessing said second data sources to draw dynamic network information associated with said broadband transmissive systems comprises the steps of: generating a plurality of blocks of commands requesting to measure said dynamic network information associated with said broadband transmissive systems; organizing said blocks of commands in parallel sessions, each session being associated with one or more data sources located in a specific portion of said fixed network infrastructure; and sending a specific block of commands included in a specific session to a specific data source located in said specific portion of said fixed network infrastructure.

However, Kobayashi discloses a method wherein said step of remotely accessing said second data sources to draw dynamic network information associated with said broadband transmissive systems comprises the steps of *(See Col 7; lines 38-44, dynamic information's):* generating a plurality of blocks of commands requesting to measure said dynamic network information associated with said broadband transmissive systems *(See FIG. 10 & Col 8; line 58 – Col 9; line 6, control command 1001 receives commands from the control server to get data from the meters which are dynamic information's, i.e. packet loss, a jitter and the like)* ;organizing said blocks of commands in parallel sessions, each session being associated with one or more data sources located in a specific portion of said fixed network infrastructure (*See FIG. 10 & Col 8; line 58 – Col 9; line 6, Control Command Receiver 1001 receives the command from the control server and send the commands to the router controller 1002 as well as QoS*

controller) ; and sending a specific block of commands included in a specific session to a specific data source located in said specific portion of said fixed network infrastructure (*See FIG. 10 & Col 8; line 58 – Col 9; line 6, the QoS instruct both the receiver and transmitter to control the quality service when relaying)*

Therefore, it would have been obvious to one ordinary skill in the art at the time the invention was made to employ the teaching method of Bowman within Kobayashi method in order to assure the quality of communication service more accurate *(See Col 3; lines 18-34).*

22. **As per claim 42:** the combination of Bowman and Kobayashi method discloses a method wherein said step of sending a specific block of commands included in a specific session to a specific data source located in said specific portion of said fixed network infrastructure comprises the steps of: querying a communication bus configured for receiving said blocks of commands *(See FIG. 10 & Col 8; line 58 – Col 9, the control server instruct the router or QoS controller to receive and execute the commands*) and selecting among a plurality of communication handlers the one whereto said specific block of commands is to be sent *(See FIG. 10 & Col 8; line 58 – Col 9, the QoS controller select a queue the commands to be sent)*; each handler being configured to handle communication between said communication bus and said one or more data sources by controlling communication channels managed by said data sources *(See FIG. 10 & Col 8; line 58 – Col 9, the QoS controller specifies a queue to be allocated (communication channel) to each flow).*

23. **As per claim 43:** the combination of Bowman and Kobayashi method discloses a method wherein said steps of accessing first and second data sources comprise a step of repeatedly accessing said first and second data sources *(See Kobayashi Col 6; lines 16-30).*

24. **As per claim 44:** the combination of Bowman and Kobayashi method discloses a method wherein said step of repeatedly accessing said first and second data sources comprises a step of periodically accessing said first and second data sources *(See Kobayashi Col 6; lines 16-30).*

25. Claims **31-35** are rejected under U.S.C. 103(a) as being unpatentable over Bowman, in view of Cruickshank, in further view of Kobayashi.

26. **As per claim 31:** the combination of Bowman and Cruickshank discloses all the limitation of dependent claim 30 except wherein said data access portion comprises: a plurality of blocks of commands requesting the measuring of said dynamic network information associated with said broadband transmissive systems said blocks of command being organized in parallel sessions, each session being associated with one or more data sources located in a specific portion of said fixed network infrastructure; a plurality of handlers, each handler being configured to handle communication with said one or more data sources by controlling communication channels associated with said one or more data sources; and an adaptive controller configured for selecting among said plurality of handlers to one whereto a specific block of commands included in a specific session is to be sent.

However, Kobayashi discloses a system wherein said data access portion comprises: a plurality of blocks of commands requesting the measuring of said dynamic network information associated with said broadband transmissive systems *(See FIG. 10 & Col 8; line 58 – Col 9; line 6, control command 1001 receives commands from the control server to get data from the meters which are dynamic information's, i.e. packet loss, a jitter and the like)* said blocks of command being organized in parallel sessions, each session being associated with one or more data sources

located in a specific portion of said fixed network infrastructure (*See FIG. 10 & Col 8; line 58 – Col 9; line 6, Control Command Receiver 1001 receives the command from the control server and send the commands to the router controller 1002 as well as QoS controller)*; a plurality of handlers, each handler being configured to handle communication with said one or more data sources by controlling communication channels associated with said one or more data sources *(See FIG. 10 & Col 8; line 58 – Col 9; line 6, the QoS controller select a queue the commands to be sent)*; and an adaptive controller configured for selecting among said plurality of handlers to one whereto a specific block of commands included in a specific session is to be sent *(See FIG. 10 & Col 8; line 58 – Col 9, the QoS controller specifies a queue to be allocated (communication channel) to each flow).*

Therefore, it would have been obvious to one ordinary skill in the art at the time the invention was made to employ the teaching method of Bowman and Cruickshank within Kobayashi method in order to assure the quality of communication service more accurate *(See Col 3; lines 18-34).*

27. **As per claim 32:** the combination of Bowman, Cruickshank and Kobayashi disclose a system wherein each handler is configured for handling: compliance with the maximum number of communication channels which can be controlled simultaneously by a single data source *(See Kobayashi FIG. 13 & Col 9; lines 45-65, FIG. 13 (a) allocates bandwidth to a queue to adjust the number of output packets so as to control the bandwidth)* ; multiple access by multiple sessions to each data source *(See Kobayashi FIG. 13 & Col 9; lines 45-65, each flow uses different queue's);* and the priorities between said sessions (*See Kobayashi FIG. 13(b) & Col 10; lines 45-63, FIG. 13(b) provides control of quality service by priority).*

28. **As per claim 33:** the combination of Bowman, Cruickshank and Kobayashi disclose a system wherein at least a handler comprises an apparatus handler configured for accessing the respective data source directly *(See Kobayashi FIG. 6 & Col 7; lines 11-44, the measure data receiver receives measurement data from the meters, i.e. dynamic information's)* , said apparatus handler comprising a channel dispatcher to receive said blocks of commands from said communication bus, queue them in appropriate queues and send them to said data source through the communication channels managed by said data source *(See FIG. 10 & Col 8; line 58 – Col 9; line 6, the QoS controller specifies a queue to be allocated (communication channel) to each flow)*.

29. **As per claim 34:** the combination of Bowman, Cruickshank and Kobayashi disclose a system wherein said at least one handler comprises an element manager handler configured for accessing one or more data source through a management module of said data source *(See Kobayashi FIG. 6 & Col 7; lines 11-44, the measure data receiver receives measurement data from the meters, i.e. dynamic information's)*, said element manager handler comprising; an apparatus dispatcher module to receive blocks of commands from said communication bus and queue them in appropriate queues differentiated by destination data source *(See FIG. 10 & Col 8; line 58 – Col 9; line 6, the QoS controller specifies a queue to be allocated (communication channel) to each flow)*; and a channel dispatcher module to check said queues and, for each queue, determine the next block of commands to be sent to the related management module, through the communication channels managed thereby *(See Kobayashi FIG. 13 & Col 9; lines 45-65, the network check the queue to see if a data can be allocated based on the remaining bandwidth)*.

30. **As per claim 35:** the combination of Bowman, Cruickshank and Kobayashi disclose a system wherein said adaptive controller comprises a list of handlers *(See FIG. 10 & Col 8; line 58 – Col 9; line 6, the controller server has a list of handlers such as Route Controller and QoS controller).*

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Mewale Ambaye whose telephone number is (571) 270-7634. The examiner can normally be reached on M - F, 8:00 am to 5:00 pm EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, William Trost can be reach on (571) 272-7872. The fax number for the organization where this application or proceeding is assigned is (571) 273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from their Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov.

Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free)?

If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (In USA or Canada) or 571-272-1000.

/M. A. /

Examiner, Art Unit 2416

/William Trost/

Supervisory Patent Examiner, Art Unit 2416